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ABSTRACT

Included in a handbook are discussions on general information for dental health for the institutionalized retarded, their need for dental care, the attendant's role in providing care, dental information for the attendant, how and when to use a toothbrush, care of toothbrushes and equipment, and indications of abnormal mouth conditions. Information is also presented on the development of programs of dental care according to cottages or wards of residents who can brush on their own, who can partially brush, or who are incapable of brushing. Recommendations for a successful dental program are outlined; photographs and charts are used throughout. (JM)

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DENTAL CARE FOR THE MENTALLY RETARDED

A HANDBOOK FOR WARD PERSONNEL

ED017622

CENTER FOR DEVELOPMENTAL
AND LEARNING DISORDERS
UNIVERSITY OF ALABAMA IN BIRMINGHAM

ED034368

DENTAL CARE FOR THE MENTALLY RETARDED

Prepared by

Dental Advisory Committee
Staff Development Project
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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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ACKNOWLEDGEMENTS

I wish to express my deepest appreciation to the Dental Advisory Committee for giving unselfishly of their time in the preparation of this manual. Their conviction that good oral hygiene on the ward is the base upon which residents build good dental health was demonstrated by their willingness to participate in committee meetings, to write various sections of the manual, and to provide photographs which help to illustrate important points.

The dentist who works in a residential setting is often faced with many problems which are beyond his control but which have a vital influence on the dental health of his patients. It was a real privilege to have the opportunity to work with this group of outstanding professional men who are highly motivated and anxious to improve the quality of dental programs in such settings.

The Dental Advisory Committee wishes particularly to thank Miss Amy Reynolds for her many contributions in the preparation of this manual. This included editing the manuscript for style, organization and clarity. Miss Reynolds began her association with this committee at the time she was with the Southern Regional Education Board and was willing to see the manual successfully completed even after she was no longer associated with the project.

The Committee also wishes to express its appreciation to Mrs. Betty Tate in the Division of Mental Retardation of the Alabama Department of Mental Health. She assisted in developing the final design for the book and provided the liaison between the Committee and the printers.

Gerard J. Bensberg, Ph.D.

INTRODUCTION

In 1966, the dentists who staff institutions for the mentally retarded in the region served by the Southern Regional Education Board* were invited to attend a conference on "Dental Care for the Retarded." This conference, held at the University of Texas Dental Branch, met with great enthusiasm on the part of the dentists, who expressed deep concern for effective dental care on the ward. They quickly demonstrated that they were not only willing but anxious to improve the quality of dental care in their institutions.

This first conference was followed by two additional conferences on dental care for the retarded, — one at the University of Alabama Dental School in 1967, and another at the University of North Carolina Dental School in 1968. These were followed by committee meetings and much correspondence, as the dentists endeavored to find workable solutions to problems concerning institutional dental programs and to develop this manual as a guide for others.

The dentists who participated in these conferences serve more than 50,000 mentally retarded, and the suggestions which they offer for effective oral hygiene programs are included in this manual.

Many institutions have inservice training programs for attendants, and it is hoped that this publication will be of value as an additional training resource. It emphasizes the importance of oral hygiene for the retarded, and the vitally important role of the attendant in providing proper dental care. In addition to presenting ideas on how to begin and carry out ward programs, it gives the attendant basic dental health facts and information on how to recognize abnormal mouth conditions.

The concept of better dental health care presented here is already being successfully carried out in many institutions; however, it may not be ideally suited to every ward situation. The primary purpose of this publication is to serve as a guide to ward personnel as they select and adapt various methods which best suit a particular ward or cottage, and to give them ideas in developing workable approaches to oral hygiene problems on the ward.

Although this book is directed primarily to residential facilities and attendants, it is hoped that it will be useful to supervisors and instructors of inservice training programs, as well as to parents and workers in day care centers.

As those who use this publication find additional or improved ways of caring for the oral problems of the retarded, the authors will welcome their suggestions and ideas.

The authors

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*The Southern Regional Education Board is an interstate compact agency serving Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

AUTHORS' NOTE

The term used for ward personnel varies from state to state, and from institution to institution. Some of the more commonly used are **attendant, cottage parent, nurse's aide, psychiatric aide,** and **matron.** Although it does not reflect his true role as a parent substitute, the term **attendant** is used in this booklet when referring to the personnel who staff wards and cottages in institutions for the retarded.

The term used to describe the retarded living in residential facilities also varies, and includes such names as **patient, student,** and **resident.** The term **resident** is used here to refer to the institutionalized mentally retarded person, whether referring to a child or an adult.

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SECTION I

GENERAL INFORMATION ON DENTAL HEALTH FOR THE RETARDED

Chapter 1

WHY DENTAL CARE FOR THE RETARDED?

WHEN we think of dental neglect, we almost automatically think of pain, discomfort, and unwanted trips to the dental clinic. Everyone needs proper dental care to avoid toothache, disease of the gums, and expensive corrective treatment, but there are other reasons for taking care of the teeth. Good teeth help us to speak more clearly, to look more attractive, and to chew food well to maintain good general health.

The mentally retarded, like everyone, benefit from good dental care. Some of the major gains the retarded make through proper dental care are discussed below:

Enjoyment of food — Throughout history, we have attached great importance to the enjoyment of food. If we did not enjoy eating, we would not invite friends to share meals with us, nor would we take great care to make mealtimes pleasant and attractive. Enjoying food is especially important to the institutionalized mentally retarded, since they do not often have opportunities to take part in many of the other pleasures normal people enjoy. For many retarded, eating is the most pleasurable activity of the day, and mealtimes are eagerly anticipated. Certainly this pleasure should not be lessened because of pain or difficulty in chewing as a result of dental neglect.

Appearance to others — Good oral care of residents indicates to parents and visitors that a high level of over-all care is being provided. Too often, perhaps, we are so concerned with the outward appearance of residents that we rate oral hygiene second in importance to body hygiene, clean clothing, neatly combed hair, and clean fingernails. This does not imply that cleanliness of the body is not important, although an unclean mouth may leave the impression that over-all cleanliness is not the rule, but rather the exception for the sake of the visitor. All forms of personal neglect of residents are unfavorable reflections on the responsible attendant and the institution in general.

Proper dental care helps to maintain the resident's teeth in good condition, so that he can eat the meats, fruits, and vegetables that are necessary for good nutrition. If the resident's chewing ability is impaired because of pain, disease of the gums, or loss of teeth, his general health will suffer, as he will reject some solid foods because they are too difficult, or perhaps even impossible, to chew. When chewing ability is destroyed, the purpose of the teeth is defeated.

Proper oral hygiene and dental care create a "chain reaction," or cycle, which works to its own advantage: good dental health care helps the resident to have **healthy teeth** — healthy teeth enable him to have **good chewing ability** — good chewing ability enables him to eat foods which build strong bodies and **healthy teeth.**

Social gains — A resident with clean, healthy teeth and pleasant breath is more acceptable and pleasant to be with than a person with untreated tooth decay. Good oral hygiene makes the resident more acceptable to those who live with him in the closeness of the ward setting, and to the attendants who take daily care of him.

Vocational gains — Good dental health and oral hygiene habits assume still greater meaning for residents who may return to the community to live and to work. The social and vocational demands of society make it essential that the training of the retarded include good oral hygiene habits. The mentally retarded person returning to the community has a far better chance of obtaining and keeping a job if he is clean and healthy. His "social life" and confidence will be enhanced because he will find a higher level of acceptance among his co-workers.

Residents fail more often in the community from lack of good personal hygiene habits than from inability to handle the job.

Gains in confidence and security — To severely retarded residents, good teeth may simply mean freedom from pain in the teeth and gums, and the ability to chew and enjoy a wider variety of food. But for the mildly retarded resident, whether he returns to the community or remains in the institution, oral health can assume a deeper meaning.

The mildly retarded resident can gain a sense of achievement in learning to take care of his oral hygiene needs. At the same time, he makes a substantial gain in self-confidence, which comes with the knowledge that he has an attractive smile. This, in turn, can support his pride in other areas of self-care, leading eventually to an improvement in general cleanliness, health and appearance.

As his confidence grows, he becomes more secure, and, therefore, better adjusted. As his self-image begins to improve, some of his personal problems begin to disappear.

Natural rather than artificial teeth — Current concepts of preventive dentistry stress the importance of keeping healthy, natural teeth throughout life. Although some mentally retarded are able to wear them, dentures are a poor substitute for natural teeth. Natural teeth which are strong and healthy are far more useful than dentures in chewing solid foods.

Less corrective work in the dental clinic — There is a wise old saying that "an ounce of prevention is worth a pound of cure." This is especially true in dental care.

In many institutions, the dentist finds it necessary to spend the

greatest part of his time performing corrective work (fillings, extractions, cleaning, etc.) and treating emergencies. Prevention of dental problems on the ward reduces the amount of work the dentist must perform in the clinic and allows him time to make frequent routine checks of the residents' oral conditions. This, in turn, provides a better opportunity to discover and treat oral problems in their early stages before serious damage occurs.

The dentist who does not spend all of his time in the clinic is also in a better position to give direct assistance to the attendant in solving oral hygiene problems on the ward.

In summation, prevention of dental decay and gum disease brings about many positive results, each of which leads to still another gain in healthier, happier, more confident residents.

The results of daily dental health care are:

Control of tooth decay and gum disorders.

Better chewing ability and enjoyment of food.

Better physical health.

Fewer toothaches.

Improved social life.

More acceptability in the residential unit, on the job, and in the community.

Natural rather than artificial teeth.

Less corrective dental work.

Increased assistance from the dental staff in carrying out the ward program.

More attractive appearance.

Greater confidence and security.

Chapter 2

THE ATTENDANT'S ROLE IN PROVIDING DENTAL CARE

MANY years ago, the attendant was viewed as a caretaker or custodian. He was only expected to see that the retarded were fed, clothed, and protected from hurting themselves or others. But this very narrow definition of the attendant's responsibilities is no longer accepted. Today, his responsibilities go far beyond the resident's physical need for food, clothing, and protection from injury. He not only meets the physical needs of the retarded on his ward, but their educational and emotional needs as well. The role of today's attendant includes that of teacher, counselor, and parent substitute. He is a model for residents to imitate.

The attendant has the key role in providing daily dental care to residents. He may have to provide direct care to severely and profoundly retarded residents; for others, he may only need to supervise toothbrushing and to encourage them to eat a balanced diet.

A balanced diet is as essential to the development of healthy teeth as it is to the development of a healthy body. The attendant can help the resident maintain a high level of health by encouraging him to eat the proper foods, and by discouraging the consumption of sweets and sweetened beverages between meals.

In many institutions, the attendant is responsible for providing specialized care prescribed by the dentist for certain residents. He may be asked to make progress reports on the residents' ability to care for their own teeth. Every attendant has a responsibility to report injuries to the mouth and teeth sustained by residents, and to report obvious diseased conditions and tooth decay which are not being treated.

Since the attendant spends most of his time working with the resident, he has an excellent opportunity to stress the importance of good oral hygiene, and to teach residents how to care for their teeth. He can help residents develop a daily routine of oral care which will become a habit to be practiced throughout life.

The resident's attitude toward toothbrushing and dental care is a very important factor in how well he will learn to take care of his teeth. One of the most valuable contributions the attendant can make is to help the resident develop a positive attitude toward oral hygiene measures by making toothbrushing and other parts of oral care pleasant. He can help residents overcome fear and distrust of

the dentist by discouraging frightening stories about trips to the dental clinic, and by seeing that the resident's visits to the dentist are pleasant.

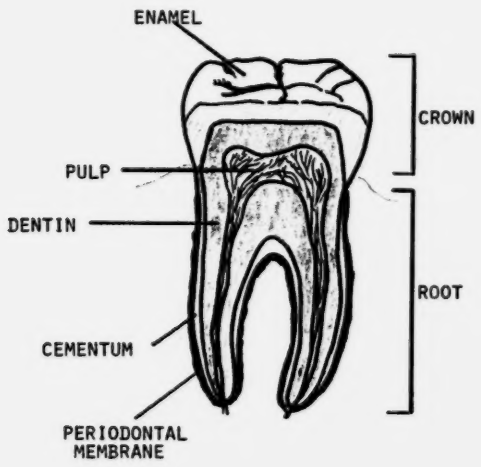
Attendants and parents are perhaps the most influential persons in the life of the institutionalized mentally retarded insofar as their attitudes and daily habits are concerned. Because he sets the example for the resident to follow, the attendant can be of great value by demonstrating a high level of care of his own teeth. In his role as teacher, counselor, and parent substitute he can instill a desire in the resident to practice good oral hygiene habits — a desire which is one of the most important steps toward healthy teeth.

Chapter 3

DENTAL HEALTH INFORMATION FOR THE ATTENDANT

ALTHOUGH it is not the purpose of this manual to present detailed technical dental information, it is felt that some general knowledge of how human dentition develops (and decays) is necessary at the outset of teaching.

STRUCTURE OF THE TEETH



Teeth are composed of:

1. Enamel — the hard covering on the exposed portion of the tooth.
2. Cementum — a bonelike material that surrounds the root of the tooth.
3. Dentin — the soft material under the enamel.
4. Dental pulp — a tissue in the center of the tooth which contains the blood vessels and nerves.

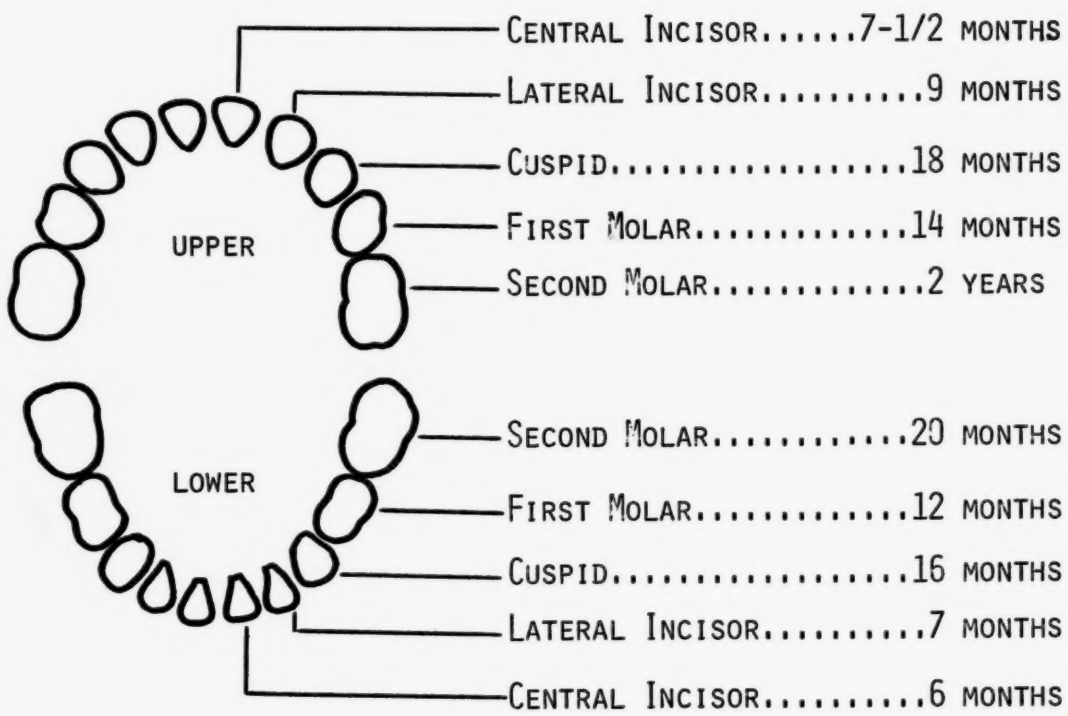
Teeth are calcified structures fixed in bony sockets in the jaws. The crown of the tooth is the visible part that grows above the surface of the gums. The root is the part of the tooth that grows below the surface, and anchors the tooth in the jaw. A tissue called the "periodontal membrane" covers the root of the tooth and lines the wall of the bony socket. This tissue helps to hold the tooth in place and cushions the tooth against chewing shock.

THE PRIMARY TEETH

The primary, or deciduous teeth, are the first teeth that grow. These teeth are sometimes referred to as "baby teeth." Primary teeth begin to develop even before a baby is born, and normally begin to erupt, or come through the gums, when the child is between six and

THE PRIMARY TEETH

AND APPROXIMATE AGE OF ERUPTION



eight months old, although time varies in individuals. The first of the primary teeth to erupt are the lower central incisors, followed by the other primary teeth erupting at varying times, up to approximately two years of age when the second molars normally begin to appear. There are twenty primary teeth — 10 upper and 10 lower.

Care of the Primary Teeth — To think it is not important to take care of the primary teeth because they will be replaced by permanent teeth is a serious error. The opposite is true—the primary teeth should receive good care because they perform the important function of chewing food, aiding in developing proper speech, and helping the permanent teeth to erupt in the proper position. Neglect of the primary teeth can cause pain, impaired chewing ability, and gum infection. Premature loss of primary teeth, or retention in the jaw too long, can cause the permanent teeth to erupt in an irregular fashion, creating serious problems in the care of the permanent teeth.

THE PERMANENT TEETH

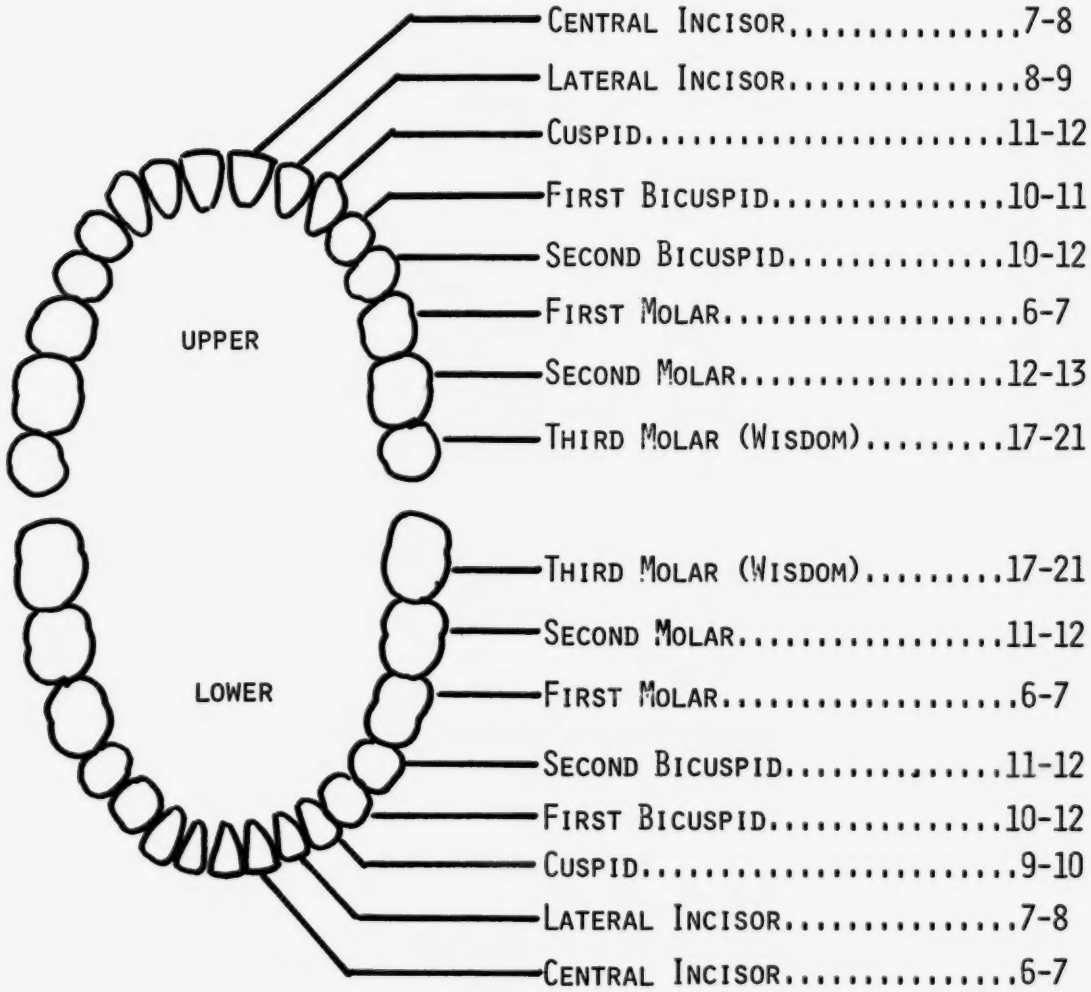
There are 32 permanent teeth — 16 upper and 16 lower. These teeth begin to form at birth. The first to erupt are the six-year molars, followed by other permanent teeth at varying times up to the age of 12 to 15 years. The third permanent molars (wisdom

teeth) usually begin to appear between the ages of 17 to 21 years.

It is particularly important that the first permanent molars receive good care, since their position and condition determine to a great extent the position of other permanent teeth. These first permanent molars are most often lost because of improper care. They are sometimes mistaken for primary teeth and therefore neglected. Loss of these teeth may result in other permanent teeth drifting into the space. This shifting of other permanent teeth is one of the causes of malocclusion (irregular position of the teeth).

THE PERMANENT TEETH

AND APPROXIMATE AGE OF ERUPTION (YEARS)



CAUSES OF TOOTH DECAY

Dental caries (tooth decay) is a widespread disease of children. It is a rare individual who escapes it.

Most dentists would probably agree with the following state-

ment on the factors which contribute to tooth decay.

"The extent of the damage to the teeth depends upon a number of factors, the most significant of which are:

1. The presence of dental plaques (gluey, gelatin like substances that adhere to the teeth and afford protection for the bacteria);
2. The strength of the acid and the ability of the saliva to neutralize it;
3. The length of time the acid is in contact with the teeth;
4. The natural susceptibility of the teeth to decay."*

There must be bacteria (germs) in the mouth for dental caries to occur. There also must be some kind of fermentable carbohydrate (primarily sugar) present in the mouth. The bacteria act on the sugar to form a destructive acid which is capable of dissolving the enamel of the tooth. This is the beginning of tooth decay.

When sugar (or other fermentable carbohydrates) is consumed, acidity in the mouth rises sharply. This happens within minutes after the sugar is taken into the mouth. In about 45 minutes to an hour, the acid in the mouth returns to normal. Therefore, the critical period —when the teeth are being attacked by the acid—is the first few minutes after eating. After each meal there is an acid attack on the teeth. When you add the attacks that occur after between-meal snacks (in the morning, afternoon, and after the evening meal), the result is an almost continuous attack of acids on the teeth throughout the day.

It is obvious that foods such as candy, cookies, cake, "dessert foods," and sweetened beverages should not be eaten between meals. It is probably more important to reduce the frequency of consumption of such foods than to reduce the amount consumed, since it is the repeated acid attacks on tooth enamel that are extremely harmful. Although dental decay cannot be entirely prevented, it can be reduced by brushing immediately after eating. Brushing removes the sugar before it can be turned into acids.

Another way to control tooth decay is to place fluoride in drinking water. Fluoride is the only element known today that will add decay resistance to tooth enamel. Children reared in areas where there is natural fluoridation in the drinking water are found to have less tooth decay than those who do not drink fluoridated water. If the drinking water does not contain sufficient fluoridation, it should be added.

The dentist can also paint a topical fluoride solution on the teeth to help reduce decay; however, the best use of fluoride is to add it to the water children drink.

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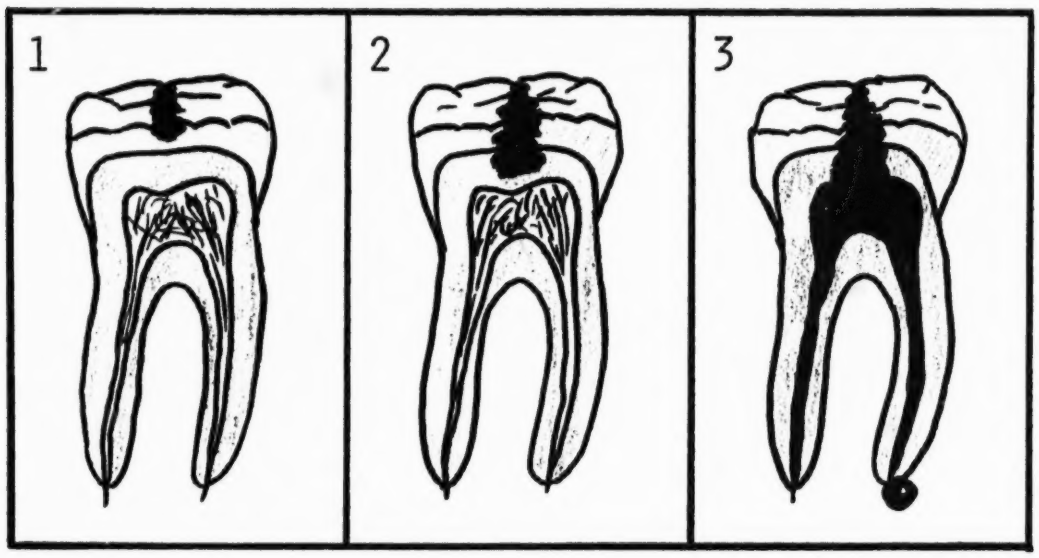
* Sandell, Perry: **Teaching Dental Health to Elementary School Children.** American Association for Health, Physical Education and Recreation.

How the Tooth Decays — Dental caries begin with a small opening in the enamel of the tooth. This opening may be no larger than a pin point at the beginning. But if it is allowed to go untreated, the opening will enlarge until the decay spreads to the dentin, which is not as hard as the enamel. When the decay reaches the dentin, it progresses more rapidly, eventually spreading to the pulp of the tooth. Once this stage of decay is reached, infection may occur and abscesses may form causing soreness, pain, and sometimes swelling. A tooth which reaches this stage of decay may have to be extracted.

It is important that the residents' teeth be checked at regular intervals by the dentist, who can discover beginning decay with x-rays, and treat it before it becomes larger.

THE PROGRESS OF DECAY



1. ENAMEL PENETRATED. 2. DECAY HAS REACHED THE DENTIN. 3. DECAY REACHES PULP, DESTROYS PULP, ABSCESS FORMS. AT THIS STAGE, THE TOOTH MAY BE LOST.

Chapter 4

TOOTHBRUSHING – HOW AND WHEN

SOME residents may not be able to brush their own teeth because of severe mental or physical disability, but many can be taught effective brushing procedures. Therefore, general tips on toothbrushing methods are presented here, although they may have to be modified according to the ability of the individual resident. The dentist's advice should be sought when you have difficulty solving brushing problems.

Many residents can use a conventional toothbrush which has a flat brushing surface. The brush should be small enough to reach all parts of the tooth surfaces. (The dentist can recommend the proper brush.) Electric toothbrushes have been found to be more effective than conventional brushes for some residents, particularly for the severely handicapped.

How to Brush — Although there is no single method which is best for everyone, the following is suggested for residents who are able to brush.

Brushing should be carried out in an orderly manner; that is, use a set procedure to prevent missing any tooth surface areas.

Upper teeth

1. Brush the upper teeth using a downward motion. Place the bristles against the gum and rotate the brush, so that the bristles sweep downward over the gums and teeth. Brush the cheek side (outside) of the upper teeth using this motion, then brush the tongue side (inside) of the upper teeth using the same motion.
2. Brush the biting surfaces of the upper teeth using a back-and-

forth scrubbing motion.

Lower teeth

1. Brush the lower teeth with an upward motion. Place the bristles against the gum and rotate the brush so that the bristles sweep upward over the gums and teeth. Brush the cheek side of the lower teeth using this motion, and then brush the tongue side of the lower teeth.

2. Brush the biting surfaces of the lower teeth with a back-and-forth scrubbing motion.

An easy way to help residents remember the direction to brush is: "Brush the teeth the way they grow: The upper teeth grow down — brush down; the lower teeth grow up — brush up."

If a resident is doing a good job of brushing his teeth, but is not following these exact motions, let him continue to brush his own way, as long as he is getting his teeth clean.

When to Brush — Dentists generally agree that the best time to brush is immediately after eating. This is relatively convenient for most individuals; however, in an institutional setting where it is necessary to work with large groups, it may not be possible to brush after eating, or even after each meal. Some institutional dentists feel that it is a question of quality versus quantity — that it is better to brush once a day, taking care to see that each resident receives a thorough brushing, than to let the resident do it himself and perhaps do an inadequate job. The once-a-day method requires a great deal of supervision and checking to see that each mouth is clean. So the question of when to brush must be left up to the individual institution; however, the authors of this manual feel that teaching residents (those who can learn) to brush their own teeth adequately should be the ultimate goal, and that it is better to teach the resident to brush his own teeth immediately after eating.

It may be particularly impractical in a ward setting to have residents brush after between-meal snacks. However, those who are capable should be encouraged to brush after snacks, or at least to rinse the mouth vigorously with water to dislodge food particles from between teeth and around the gums.

Chapter 5

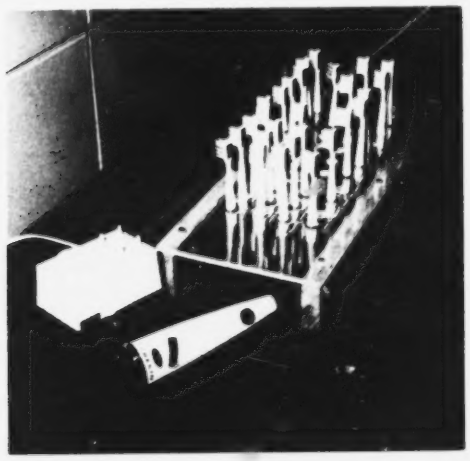
CARE OF TOOTHBRUSHES AND EQUIPMENT

TOOTHBRUSHES must be kept clean. After each use they should be rinsed individually with cold running water and hung up to dry in the air, not contacting other brushes or dripping on brushes hanging below. Rinsing brushes with hot water is not particularly helpful, since the water from the faucet is not hot enough to sterilize the brush. Furthermore, hot water softens the bristles. Most toothbrushes are not boilable. If sterilization is recommended by the dentist, use the method he advises.

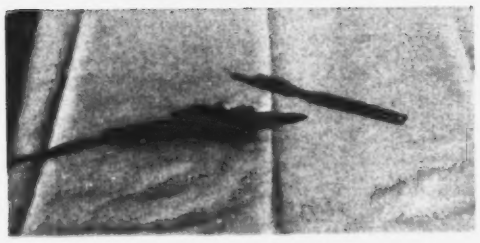
Every resident should have his own toothbrush. Some institutions have been able to provide two brushes for each resident to be used alternately. This arrangement prolongs the life of the brushes because it allows them to dry thoroughly between uses.

Toothbrushes should be examined periodically for evidence of damage. Brushes that are beginning to fray or soften should be discarded and replaced by new ones.

Identification of Brushes — A method of identifying brushes must be provided if the brushes are not kept by the residents themselves. Color coding can be used in small groups, but on large wards, it is better to place the resident's name on the brush handle.



Labels can be made with a machine that cuts letters into a plastic adhesive tape that can be placed on the brush. An identical label is made in the same manner to be placed on the storage rack or board to designate the location of the brush. Adhesive labels may have to be replaced from time to time, as they may lose their ability to adhere to the handle after many washings of the brush.

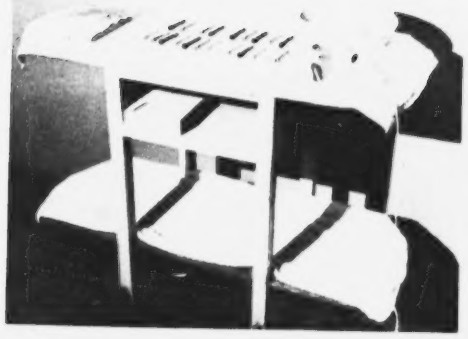


Another method which some institutions use is to cut the resident's name on the brush handle with an electric pencil. The cut is then marked over with a waterproof marking pen.

Placing the residents' names on the brushes is a more desirable method of identification than using codes, colors, or symbols, since it allows brushes to be identified quickly and does not involve looking at a chart or record sheet.

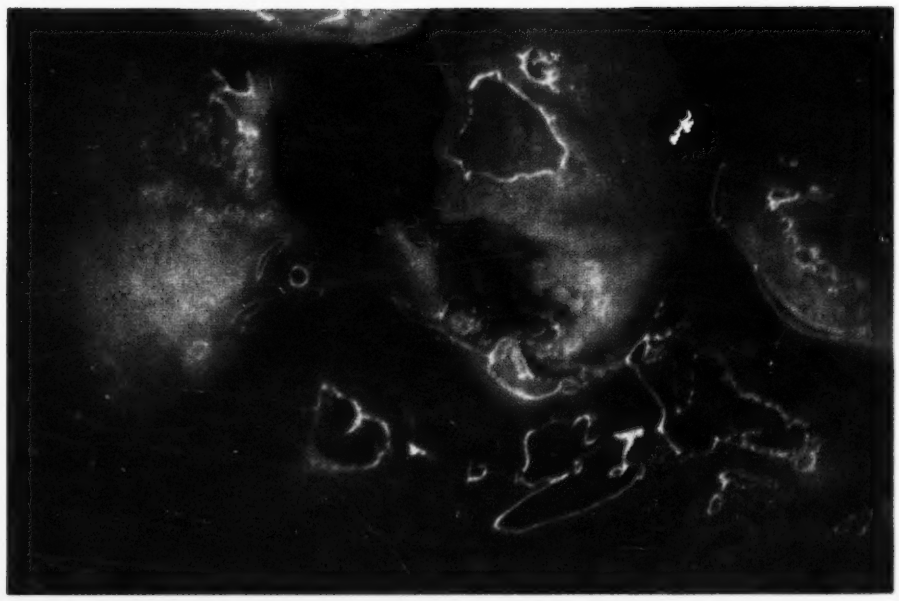
Storage Boards and Cabinets

Attendants in some institutions have designed racks, boards, and cabinets which can be constructed by institutional personnel from inexpensive materials. One such board is illustrated. Note that the brushes do not touch or hang one above the other. Name labels have been placed on the board to identify the position of each resident's brush. In large wards or cottages, more than one board may be necessary to hold all the brushes. Boards should have washable surfaces which will not be damaged by constant contact with water.

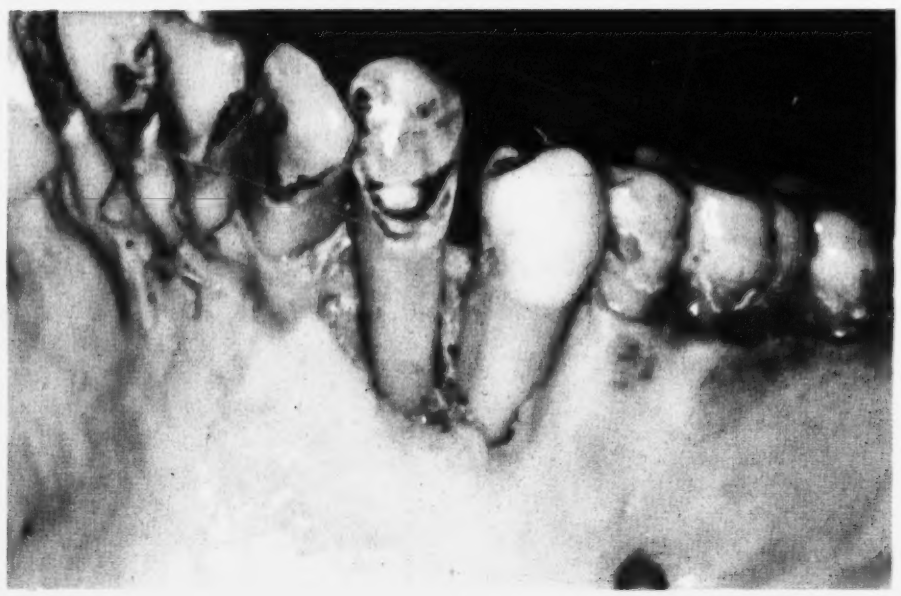


Carts

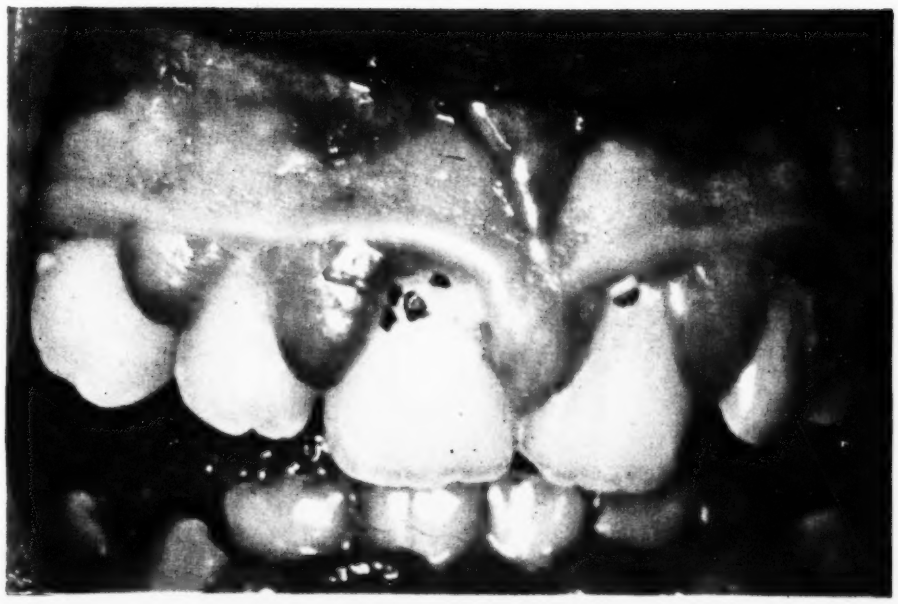
A "toothbrushing cart," which is very useful in carrying out brushing for bedfast and other non-ambulatory residents, can be made by attaching wheels to an ordinary night stand. Inexpensive metal tea carts can also be used.



A-Severe gingivitis. Dental decay is also produced by the poor oral hygiene and bacteria present.



B-The end result of gum and dental disease (periodontal disease). A deceased patient showing destruction of the jaw bone.

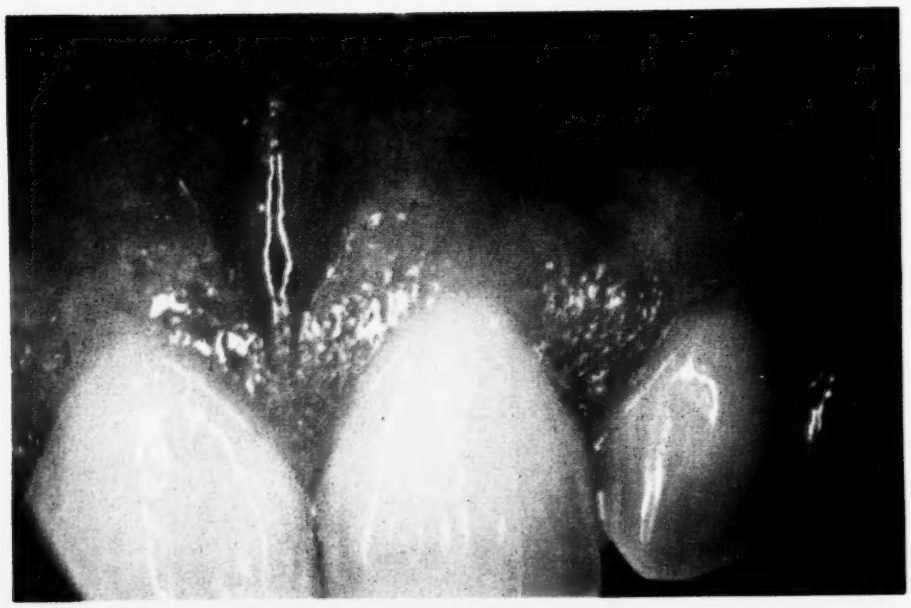


C-Moderate to severe dilantin hyperplasia in a 14 year old epileptic.

D-The same girl shown above taken three months after surgery to remove excess gum tissue and followed by a good oral hygiene program.

E-A cancerous sore on the lip (dyskeratosis). Leukoplakia is a condition which begins as a faint white patch on the gums, lips or cheeks and may or may not become malignant.

F-Advanced cancer of the tongue. Tumors frequently occur in this location and cannot be seen unless the tongue is pushed to one side and extended.



G-Healthy pink gums with no swelling, bleeding or tartar on the teeth.

H-Moderate inflammation of the gums (gingivitis) which needs attention by the dentist and a good oral hygiene program on the ward or cottage.

Chapter 6

HOW TO RECOGNIZE ABNORMAL MOUTH CONDITIONS

THE purpose of this chapter is to describe some of the more common mouth problems. No attempt will be made to explain their treatment, but merely to state some of their causes and ways to recognize them. Most of the conditions described here should receive the attention of the dentist. At regular and frequent intervals, the teeth, gums, tongue, cheeks, and roof of the mouth of each resident should be thoroughly examined by the attendant so that any abnormal conditions may be discovered early and reported to the dentist.

It is suggested that residents without teeth be inspected at least every few days since they may have tissue problems. If they are denture wearers, it is important that both partial and full dentures be removed during an oral inspection. Look carefully and completely during the examination.

In order to recognize a mouth condition that is not normal, or may need attention, you must first be able to recognize the normal. Healthy gums are pale pink and firm to the touch. Portions of the gums located farther away from the teeth have less pinkness and many small blood vessels may be observed. Where the gums actually come in contact with the teeth surfaces, they should be very thin. The gums should meet all of the teeth at about the same level; that is, the gum line should be about the same for all the teeth.

SWELLINGS

There are several kinds of swellings that can be present in the mouth. Not all swellings mean that there is something wrong, but many do.

Erupting teeth — It is quite normal for the gum to swell around an erupting tooth. These swellings do not normally last very long and the gums usually appear healthy. However, if the gums do not appear healthy, there is a problem with the erupting tooth, and the resident should be referred to the dental clinic.

Bone enlargement — Another type of swelling that you may notice is not actually a swelling at all, but an enlargement of the bone under the gums. These enlargements are usually found in the center of the roof of the mouth and on the inside of the lower jaws. They are called **tori** and rarely cause trouble, but since they extend into the mouth more than other structures, they should be observed

frequently for ulcers.

Drug-related swellings — A kind of swelling that is not normal, but is very common in institutions, is caused by use of some of the seizure-control drugs. This is one cause of gum hyperplasia (an abnormal or unusual increase in gum tissue). The appearance of the gums is one of a somewhat rounded swelling of tissue between each of the teeth. This swelling is found most often in the front of the mouth, and can cause the gums to become bright red, indicating infection. In this case, the dentist should see the resident. The amount of swelling can vary from a small amount to enough gum tissue to cover the teeth.

Swellings which are drug-related do not always require treatment by the dentist, and treatment of the condition varies with each dental department. If you are unsure about whether this condition is "normal" in a resident, talk with your dental staff.

Swellings caused by infection or growths — Swellings such as these do require the immediate attention of the dentist. They are very often tender to the touch and can be quite painful. They may be large, rounded swellings, with enlargement of the face, or a small pinpoint area on the side of the gum. (The latter are called "gum boils.") Some may protrude from the gum surface like an extra piece of tissue, or they may come up out of the gums following a tooth extraction. They may cause the gums to be quite red in the area of the swelling; if there is pus present, the swelling may be yellowish in color. There may or may not be an increase in body temperature with these swellings.

DEPOSITS

Deposits on the teeth are a sign of neglect or improper cleaning. Clinging food particles, left in the mouth from incomplete toothbrushing, can be the start of serious gum disease. A hard, crusty substance called "tartar" builds up on the teeth when they are not brushed daily or are improperly brushed. Tartar can cause gum disease such as pyorrhea (periodontitis), which is an inflammation of the tissue around the teeth. It irritates the gums, causing them to enlarge. Tartar can eventually be deposited so far down on the root of the tooth that the gum shape is lost, bone support of the tooth is lost, and the tooth then becomes loose and must be removed. Most bleeding problems of gums involve some part of the above process.

Tartar deposits cannot be removed by ordinary brushing, but must be removed by the dentist.

HALITOSIS

Halitosis or "bad breath," may be caused by improper diet, chronic tonsillitis, etc., but it can also be caused by lack of proper oral hygiene. Thorough cleaning of the mouth, effective medical and

dental care, and a proper diet usually will take care of the problem of halitosis.

TOOTHACHES

The term "toothache" is used to describe many painful conditions in the mouth. Actually, a toothache is a condition of pain arising from disease of the pulp inside the tooth or the tissue surrounding the tooth. Many times there is actually a toothache,—the pulp itself aches —but in many instances the pain arises from other causes. Ulcers, sore spots, gum disease, burns, and many other things are often described as toothaches. All, however, do need the attention of the dentist. It is important for the attendant to give the dentist as much information as possible about the pain—the area of the pain, length of time the pain has been present, the presence or absence of fever, and any other information that might be pertinent. Many times a resident will tell about or point to a painful area of the mouth in the presence of the attendant, but will not communicate with the dental staff.

MOUTH AND LIP SORES

Mouth and lip sores may require treatment, and all should be examined by the dentist. Although the incidence of mouth cancer is low, some mouth and lip sores could eventually become cancerous. Watch especially any sores that do not heal.

Ulcers — There are two major types of ulcers, — single and multiple. Of the two, single ulcers are more common. These are usually found in the crevices of the gums or on the lips. They are commonly called "cold sores." Single ulcers may be found frequently in female residents during their menstrual periods.

Many residents who spend a great deal of time in the sun sometimes get lower lip ulcers. These are actually sun burns, but should always be reported. When a resident is taking some of the tranquilizers, his skin has a tendency to be even more sensitive to the sun. Another kind of single ulcer is caused by chewing the numb lip or cheek following dental anesthetic. These ulcers have a tendency to be large. The ulcers will heal in a week or two, but should be checked often by the dentist to prevent infection.

Multiple ulcers are scattered throughout the mouth. They have many causes, among them viruses, general body upset, and indirect reaction to drugs. Residents with multiple ulcers are usually quite ill, have a fever, do not eat or drink, and have very sore mouths. The resident should be seen by the dentist and the physician so that the cause of the ulcers can be treated and the general comfort of the resident restored. One of the most important things to remember during this time is not to give the resident anything to eat or drink that is hot, spicy, or contains fruit juice. These foods will make the resident much more uncomfortable.

INJURY

Injuries to the mouth may also occur. Even the slightest injury to the mouth should be checked by the dentist. Although there may be no apparent damage, a tooth could have been made non-vital as a result of a blow. Fractured teeth should be examined immediately by the dentist. If a tooth has been completely knocked out of the mouth, it should be recovered and taken immediately to the dental clinic with the resident. Speed is important.

Cuts of the lips, tongue, and cheeks should be examined so that the wound can be cleansed and sutured if necessary. Cuts are sometimes treated in the medical clinic, but the dental clinic should be notified to check the inside of the mouth. If there is much bleeding of the mouth as a result of an injury, pressure with a sponge against the area will help control the bleeding until the resident can be treated in the clinic.

SPECIAL MEDICAL PROBLEMS

Some residents in the institution may have special medical problems which require specialized dental care.

Congenital or acquired heart disease — Children who have had damage to the heart valves from rheumatic fever or who were born with some type of heart malformation are "high risk" dental patients. These residents are serious medical problems as the heart valves can be further damaged by bacteria getting into the blood. For this reason, antibiotics are given during dental treatment to kill bacteria that might get into the bloodstream. It is important that these drugs be given exactly as prescribed by the dentist. Oral hygiene for these residents should be perfect, and bleeding should not occur during toothbrushing since it would allow bacteria to enter the bloodstream. Special daily oral care may be prescribed for such residents.

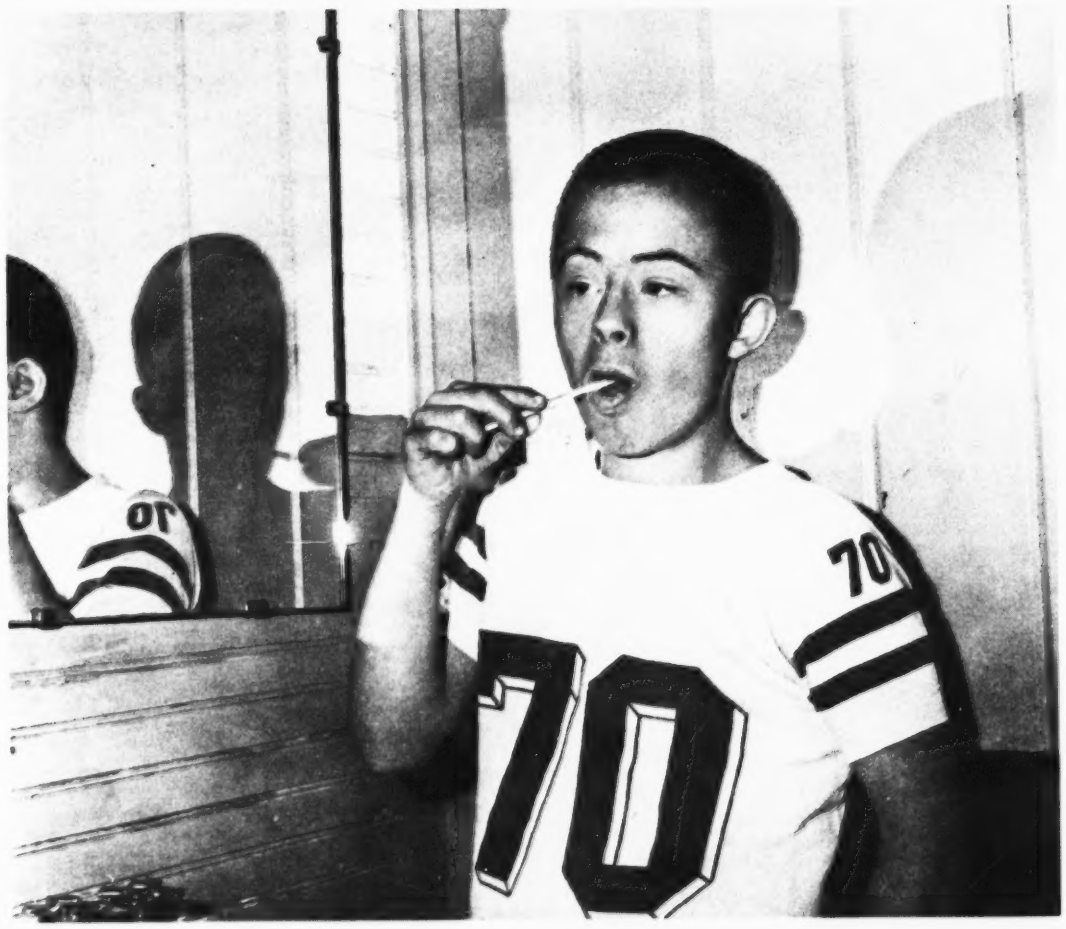
Diabetes — Diabetes is a condition caused by a defect in the amount of insulin the body produces. It is controlled by exact regulation of food intake and insulin. It is common for residents with diabetes to have slightly loosened teeth from time to time, but this can be kept to a minimum by good daily oral hygiene. Diabetics who have had oral surgery should be watched closely since delayed healing is usually experienced.

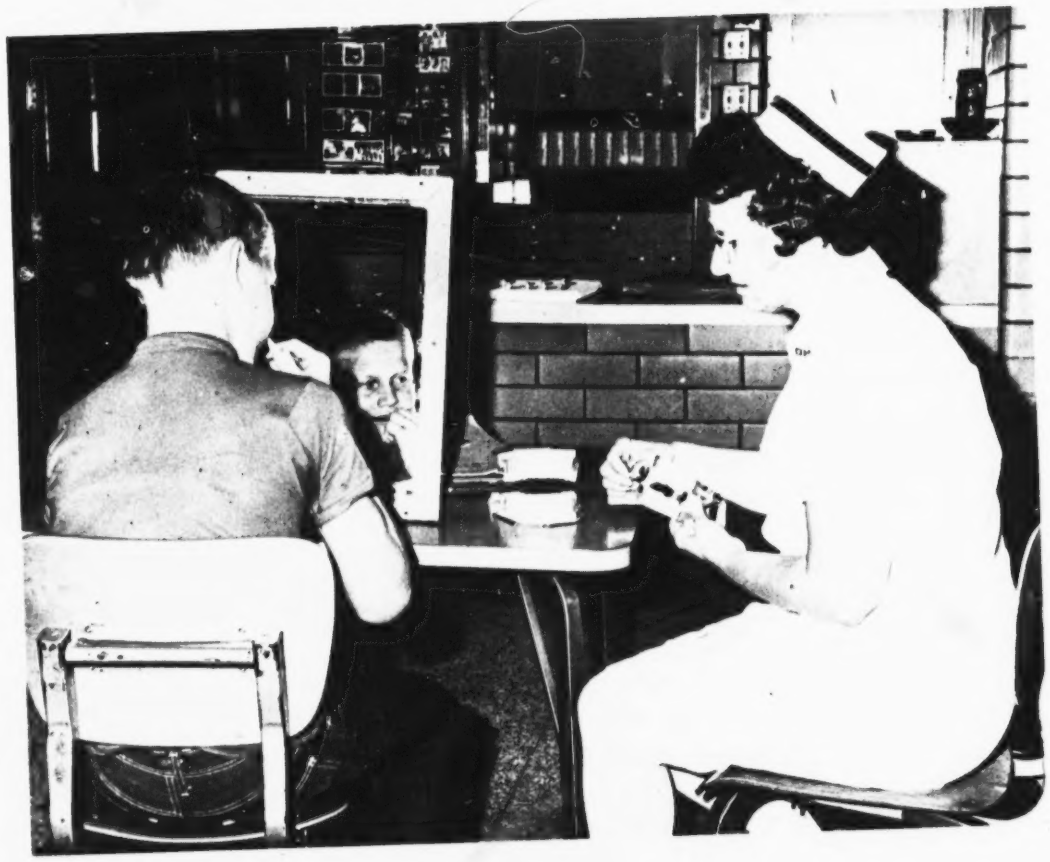
Kidney disease — As with diabetics, it is important for residents with kidney disease to have excellent oral care. Residents with clean mouths have less risk of further kidney infection than residents with unclean mouths.

Tuberculosis — Tubercular residents should also receive good dental care. Wear a mask, gloves, and gown when providing oral hygiene to a resident with active tuberculosis. Special care should be taken to keep all toothbrushes and materials isolated.

Tube-fed residents — Residents who do not take food through the mouth may have a problem with dry lips. Vaseline or mineral oil

applied to the lips will make the resident more comfortable. The inside of the mouth, if dry, can be moistened with a wet sponge. Cleaning the mouth may be accomplished by gently swabbing the gums and teeth.





SECTION II

GROUP CARE

Chapter 7

COTTAGE PROGRAMS – GENERAL

THE first section of this manual has attempted to give you a better understanding of why dental care is important, how the teeth develop, some of the reasons they decay, and other general information concerning dental care and dental health.

This section is concerned with giving you ideas on how to organize and implement effective oral hygiene programs on the ward. The program outlines presented in this section are meant to serve only as examples, although they are being successfully used in some institutions. It may be necessary to revise or alter the program as presented to conform to your particular ward or cottage arrangement.

Organization — Dental care of large groups requires a highly organized and systematic program. It is necessary that all ward personnel be advised of procedures so that there will be little confusion as to the jobs to be done. It is impossible to help carry out a program efficiently if you don't know how it works, or what is expected. If all who are concerned with the residents' physical care on the ward are knowledgeable about the oral hygiene program, it stands a better chance of accomplishing its purpose.

One of the first issues to be decided on is **when to brush.** As already mentioned, immediately after eating is the most effective time to brush, since this is the time when acid attacks on the teeth are most damaging. Every effort should be made to schedule brushing following mealtimes.

When a time schedule has been established, it should be adhered to from day to day. This not only eliminates confusion, but helps the resident establish a routine of brushing that will become a habit.

It is helpful to assign responsibility for certain parts of the program. This gives the attendant more definite paths to follow and eliminates duplication or omission of the tasks to be performed. It is advantageous to assign a small group of residents to each attendant, so that responsibility will be clear, teaching will be consistent and therefore less confusing to residents, and the residents' progress can be closely observed. This method allows the attendant to give more individual attention to each resident as he learns how to brush. Under this plan, toothbrushing can be carried out in shifts, with each attendant taking care of brushing and checking his own group at the established time.

Group Care

The mentally retarded vary a great deal from each other. Age, personality, physical and mental ability, and attitude all determine to a great extent the degree to which they can learn to care for their oral hygiene needs. It is helpful, therefore, to evaluate each resident's ability and readiness to learn, because it will give you an idea of where to begin training and how much help to offer. (You may want to enlist the help of the dental staff in determining these points.)

From a toothbrushing standpoint, residents might be divided into three groups or categories:

A. SELF-CARE — This group is composed of residents who are able to brush their teeth, but require encouragement and minimal teaching and/or supervision.

B. PARTIAL-CARE — This group is composed of residents who are able to carry out only part of the toothbrushing without help, and who need close training and supervision.

C. TOTAL-CARE — This group contains residents who are unable to assist in any significant way in brushing their teeth.

In most institutions, residents are already divided into categories of mental ability; that is, those with similar mental abilities are grouped together in a cottage or ward. For purposes of the dental program, however the residents are divided within the ward by ability to take care of their own oral hygiene needs. For example, a resident may have to be placed in the total-care group because he is physically unable to brush his teeth — not because he is mentally unable to learn how to brush.

If your ward is composed of mildly retarded residents, for example, you may want to group the residents with similar abilities, so that teaching will be easier. You may also find that some of the suggestions mentioned in the outline for partial-care residents may be of help to you, even though your residents are for the most part mildly retarded.

As you work with your groups in the beginning of the program, you will discover each resident's degree of ability. It may be necessary to experiment and re-group the residents, but as soon as a workable arrangement of groups has been found, routine should be established and strictly followed.

Chapter 8

PROGRAM OUTLINES

THE following outlines for the three groups contain general information about the abilities of the group, general suggestions, and a brief description of how to begin training.

A. Self-Care Group

Residents in this category will be mildly and moderately retarded, and, of course, the easiest group with which to work. Most of them will be ambulatory and able to stand at the lavatory to brush their teeth. They will be able to take care of their personal needs, be more co-operative, and require a minimum of supervision. They can usually brush their teeth without a great deal of help, but must be reminded to do so. Some may need to be taught correct manipulation of the brush to do a more effective job of brushing.

The children in this group will usually attend academic school. The school can be very valuable in motivating and educating residents to take care of their teeth. The special education teacher can work in cooperation with hygienists, dentists, attendants, and other ward personnel in teaching residents good oral hygiene habits. Good communication must be maintained between those teaching oral hygiene in the school and the attendants, since the attendant is the person who supervises the resident in the daily care of his teeth. It might be advantageous at the beginning of a program for the self-care group to hold a planning meeting of teachers, hygienist, rehabilitation department, dentists, attendants, and other ward personnel to

decide these points, so that the resident will not be confused by inconsistent teaching methods between the school and the ward.

Another way to coordinate instruction would be to have the dentist or hygienist visit the classroom to demonstrate proper brushing methods and methods of general oral hygiene. The dentist or hygienist could then carry out the demonstrations on the ward so that attendants can follow the same method in the actual daily oral care and supervision of residents.

The self-care group can benefit from the use of booklets, films, posters, models, and other such materials in learning the value of oral hygiene. Many helpful aids of this type are available. (See "Additional Resources" listed in the back of this manual.) Many of these aids are available at little or no cost, and should not be overlooked as valuable resource material, both on the ward and in the classroom. Ask your dentist to help you obtain those which you feel would be of help.

Attendants and teachers can also motivate residents by helping them to make their own posters and displays emphasizing the importance of taking care of the teeth.

Group brushing — Although the self-care group is the most capable, it will still be necessary to see that they have a set routine to insure that each resident is receiving proper care. The following routine might be set up for daily oral care on the ward:

1. Take a small group of your residents (as many as you can supervise efficiently into the lavatory.
2. Give each resident his brush, or have him find it on the board, and supervise him in putting the dentifrice on the brush. (Use a small amount of dentifrice—experience will help in determining the amount.)
3. Observe the residents as they brush, and give help where needed. Teach those who can manage it the brushing method described on page 19. You may want to stand behind the resident with your hand over his, guiding him through the correct motions, while he observes in the mirror.
4. After the resident has brushed and rinsed his mouth with water, inspect his mouth (using tongue depressors to pull back the cheeks and lips) to see if he has brushed adequately. (You might want to make notes on those in the group who are not doing a good job or who are having trouble brushing, so that you can give specific help at the next brushing time.)

5. Finally, have the resident rinse his brush and store it in its proper place.

Inspections of the residents' mouths should be made periodically (perhaps once a week) to see that the quality of the brushing is maintained, and whether abnormal conditions are developing such as bleeding gums, swellings, cavities, etc.

The self-care group should assume more and more responsibility for their own oral care, and the care of their brushes, as they receive training. Eventually, they should be able to do a responsible job of brushing, and requiring only that you see that the set routine is maintained, and motivation kept high.

B. Partial-Care Group

The partial-care group will generally be moderately to severely retarded. They usually require close supervision and direct assistance to perform the routine tasks of every-day living. When asked to brush their teeth, some will attempt it, but will usually brush only the front teeth.

Residents in this category may not be able to see long-term benefits of brushing their teeth. They may not understand that brushing their teeth now will be important to them next year, or five years from now. For example, if you are teaching a resident to brush, you will not be able to motivate him by explaining that brushing his teeth is important to his social and emotional well being. Instead, he may have to be taught toothbrushing on the premise that it "makes him handsome," it "keeps his teeth from hurting," or that it makes him healthier.

In teaching this group, do not expect rapid learning. Repeat each step of the task many times until it is mastered, and then move to the next step until the resident is able to carry out the entire task for himself. This group will require your patience.

Break the task down into small, easy-to-accomplish steps. For instance, you might teach the various parts in the following manner:

1. Hold toothbrush with help.
2. Put brush in mouth with help.
3. Make brush strokes in mouth with help.
4. Make brush strokes by self.
5. Brush teeth from beginning to completion by self on being told to do so.

Don't move to the next step until the resident has mastered the previous step. Keep the training sessions short and as pleasant as possible. If the resident begins to lose attention or become upset, stop and resume later when he is more susceptible to being taught. If possible, follow training sessions with some pleasant activity. Compliment the resident on any effort he makes to brush. A smile, hug, or pat will let the resident know that you are pleased with his efforts.

Demonstrations are very helpful to this group—let the resident watch you brush your teeth.

The partial-care group can be motivated by such things as placing a list of names on a bulletin board and placing stars by the names of those who are making progress.

Again, routine is important, especially to this group. Toothbrushing should be taught in the same place, by the same method, at the same time each day. Inconsistency in these matters will only confuse the resident and make learning harder for him. Each shift should be aware of the importance of consistency in teaching.

Attendants working with partial-care residents may need help from the dental staff in determining the best methods of brushing for individual residents. Don't hesitate to ask the hygienist or dentist for assistance.

Group brushing — It is difficult to set forth definite group procedures for these residents, since their individual physical and mental capabilities will determine to such a large degree how much individual help they will require. For example, some may be ambulatory, others non-ambulatory; some may have good muscular coordination and hand use, while others have poor coordination; some may benefit from the use of electric toothbrushes while others may be able to carry out brushing with conventional brushes.

The following program is suggested:

1. Have a small group go to the lavatory with the responsible attendant.
2. Prepare the brushes with dentifrice and issue them to the residents. Demonstrate (1) how to hold the brush, (2) how to place it in the mouth, and (3) how to make brush strokes. Observation of the residents during these first sessions will determine which ones are going to require the most help. Give individual help as needed, guiding the resident through the motions of brushing. As you work with a resident, let the others watch while they wait their turn to be helped. Gradually bring the group to the same level of ability, and then begin teaching them as a group, mastering the steps one by one as described.
3. After the residents learn to use the brush properly, start teaching them how to rinse and store the brushes.

4. Inspect the residents' mouths for cleanliness and general condition.

If there are non-ambulatory residents in the group, special arrangements must be made for them. Wheelchair residents can be grouped together and supplies brought to them on a wheeled cart equipped with brushes, dentifrice, cups, water, a basin for expelling rinsing water, towels, tongue depressors for pulling back the cheeks for inspection, etc. The cart can be prepared before mealtime and held in readiness for brushing afterward. If the ward or cottage arrangement permits, wheelchair residents can be wheeled to the lavatory together, while other attendants carry out brushing for bedridden residents.

A great deal of time will be needed to complete the training, but the goal is to lead the partial-care group to independence in taking care of their own oral hygiene needs. The time spent in training is rewarded when residents who formerly required help at each brushing are "promoted" to the self-care category. The more the resident is able to do for himself, the easier your task will be.

C. Total-Care Group

This group will be composed mainly of the severely and profoundly retarded. Many of them will be wheelchair or bedfast residents.

The total-care group will need much individual instruction and help, and some may never be able to be of much assistance in cleaning their own teeth. With training, however, some may be able to assume some responsibility.

Some of these residents may not be able to use a foaming dentifrice, or to rinse their mouths with water after the brushing is completed. The dentist should be consulted on the kind of dentifrice and brush to be used, as well as methods of cleaning these residents' teeth. You might want to ask the dentist or hygienist to make regular ward visits to help you determine the individual resident's requirements, and to advise on cleaning methods for residents with gum problems.

Many institutions have found the electric toothbrush to be superior to conventional brushes, and well worth the initial investment for residents in this group who cannot master handbrushing or who are uncooperative.

Group brushing — It will be necessary to work with these residents on a one-to-one basis, and in some cases, it may be necessary to enlist the aid of another attendant. How the group program is

planned depends upon the types of disabilities within the category. For those who are non-ambulatory, a wheeled cart, as described under the Partial-Care category, might be used so that brushing can be carried out at the bedside or at the dining table after meals.

The following suggestions may be helpful:

1. As in other categories, small group assignments should be made to specific attendants.
2. While ambulatory residents are being brushed in the lavatory, bedfast residents can be brushed by other attendants. If there is a shortage of attendants on the ward, brushing might be carried out in shifts, with all attendants helping with each group.
3. For patients who cannot rinse the dentifrice from the mouth, the inside of the mouth may be wiped with a towel. Experience in dispensing the correct amount of dentifrice will be of help. (In order to reduce the danger of a bedfast resident aspirating food particles or dentifrice, elevate his head during brushing.)

This group will be more difficult than the self- and partial-care groups; however, they will have fewer oral problems if they receive proper care. Some may reach a degree of proficiency that will enable them to be promoted to the partial-care group, while others will always require total care.

Chapter 9

NOTES ON PROGRAMS FOR THE THREE GROUPS

THE following recommendations have been gathered from various institutions which are carrying out successful ward oral hygiene programs. Although some of these points have already been mentioned in other parts of the manual, they are presented here as a summary of the factors which contribute to successful programs. No attempt has been made to list them in order of importance. All are essential to successful care, motivation of residents, or good general dental health.

1. If between-meal snacks are desired, fibrous foods such as raw vegetables and fresh firm fruits should be made available. Good examples are apples, carrots, and celery. These foods are referred to as "detergent" foods because they require thorough chewing which forces them over the teeth and gums, ridding them of sticky foods. They could be called "nature's toothbrush." Discourage between-meal snacks of sugary foods and beverages.
2. A positive attitude toward oral hygiene measures on the part of the resident is essential to good care. Try to make training as pleasant as possible, and help residents overcome their fear of going to the dental clinic.
3. Keep residents motivated to brush their teeth through the use of posters, visual aids, booklets, discussions on the importance of healthy teeth, and the like. Praise is especially effective—give the resident a hug, pat, or smile to let him know you are pleased with even his slightest effort to brush his teeth. If practical, let the resident keep his own toothbrush among his personal items.
4. Every lavatory should be equipped with mirrors to help the resident see how to brush. Mirrors can also be motivators as you point out pretty smiles and nice looking teeth after brushing.
5. If the routine of brushing after meals is strictly adhered to, residents will accept brushing as part of their daily life and will be likely to continue the habit even if they leave the institution. Routine also assures that the job gets done, and with less time and confusion.
6. Keep brushes, dentifrices, and other materials used in the brushing procedure in a neat and orderly fashion. Have a

wastebasket handy in the lavatory for discarding the disposable materials used.

7. **NEVER** use the same tongue depressor (or any other material that is used on the inside of a resident's mouth) for another resident. Diseases may be transmitted from one resident to another through unhealthy practices.

8. Demonstrations are important in teaching residents to brush. Have the residents watch you brush your own teeth. Set a good example for them to follow.

9. Break the task down into easy steps when teaching residents who are not able to carry out the entire procedure of brushing in the beginning.

10. Do not hesitate to ask your dental department for help if you are having difficulty with any part of the program, whether it is getting a resident to brush, or determining the best method and materials to use.

11. Make periodic inspections of the resident's oral condition and report immediately any abnormal conditions.

12. Be patient—take the necessary time to do a thorough job of training. Your time and efforts will be rewarded as you observe residents under your care become more and more independent in taking care of their oral hygiene needs.

APPENDICES

APPENDIX A

1. Arnim, Sumter S., and Dierecks, Clinton C., and Pearson, E. A.: What You Need to Know and Do to Prevent Dental Caries and Periodontal Disease. **Journal of the North Carolina Dental Society,** Vol. 46, No. 4, August, 1963.

2. Gertenrich, Roger L., and Lewis, Marian J.: A Study of Automatic and Hand Tooth Brushing as Used on Retarded or Handicapped Patients. **Journal of Dentistry for Children,** Vol. XXXIV, May, 1967, 145-164.

3. Irwin, Vern D., and Wilson, Netta W.: Dental Health Teaching Outline No. 1 — For Grades 1, 2, and 3. Published by American Dental Association, 1965.

4. Sandell, Perry: Teaching Dental Health. Published by American Association for Health, Physical Education, and Recreation, 1956.

5. Schour, Isaac, and Massler, M.: The Development of the Human Dentition. **Journal of the American Dental Association,** Vol. 28, 1153-1160, July, 1941.

6. American Dental Association Publication: Audiovisual Materials in Dentistry; The Care of Children's Teeth; 1968 Catalog — American Dental Association; Dental Health Facts for Teachers; A Dental Health Program For School; Development of the Human Dentition; Diet and Dental Health; Fluoridation Facts—Answers to the Criticism of Fluoridation; Orthodontics Questions and Answers; and You Can Teach Toothbrushing.

7. Edco Educational Communications, Educational Division, Rocky Mountain Metal Products Company: Guide For Parents on Dentistry For Children.

8. Metropolitan Life Insurance Company, 1955: For Good Teeth. January, 1968.

9. Reader's Digest: What the Cigarette Commercials Don't Show, January, 1968.

APPENDIX B

Audio Visual Titles	Type and Time of 16 mm Films
A Smile To Keep	Audio - color - 15 min.
Behind The Smile	Audio - color - 15 min.
Come Clean	Audio - color - 10 min.
Dental Health Education in Review	Audio - B&W - 6 min.
Dental Health: How and Why	Audio - color - 10 min.
Dottie and Her Dad	Audio - B&W - 4 min.
Dottie and The Dentist	Audio - B&W - 4 min.
Drop in the Bucket	Audio - color - 8 min.
Fluoridation	Audio - B&W - 5 min.
Gateway to Health	Audio - color - 20 min.
Healthy Teeth, Happy Smile	Audio - color - 20 min.
It's Your Health	Audio - B&W - 22 min.
Judy's Smile	Audio - color - 10 min.
Laurie Learns a Secret	Audio - color - 22 min.
Learning to Brush	Audio - color - 10 min.
Matter of Choice	Audio - color - 27 min.
One in a Million	Audio - color - 6 min.
Our Teeth	Audio - B&W - 10 min.
Road to Health and Happiness	Audio - B&W - 11 min.
Save Those Teeth	Audio - B&W - 9 min.
Set The Stage For Dental Health	Audio - color - 28 min.
Swab Your Choppers	Audio - color - 10 min.
Target: Tooth Decay	Audio - color - 11 min.
Taro's Adventure in Health	Audio - color - 20 min.
Teeth Are To Keep	Audio - B&W - 10 min.
Teeth: Structure and Care	Audio - color - 11 min.
Today Alice is Three	Audio - color - 17 min.
Told By a Tooth	Audio - B&W - 10 min.
The Truth About Fluoridation	Audio - color - 12 min.
The Vigil of Jenny Fay	Audio - B&W - 30 min.
What We Know About Teeth	Audio - color - 15 min.

APPENDIX

Audio Visual Titles	Type and Time of 16 mm Films
Why Fluoridation	Audio - color - 15 min.
Winkie The Watchman	Audio - color - 10 min.
Why Eat Your Vegetables	Audio - color - 11 min.
Why Clean Your Teeth	Audio - color - 10 min.
What's Your Face Value?*	color slides
Billy Meets Tommy Tooth*	Audio - B&W - 5 min.
Control of Tooth Decay*	Color slides
Basic Dental Health Education for Parents, Teachers*	Color slides
Dental Caries: Prevention and Control*	Color slides
Health and Teeth*	Color filmstrip
Tips on Tooth Care*	Color filmstrip

Special audio-visual material about mental retardation and handicapped

Audio Visual Titles	Type and Time of 16 mm Films
Dental Care for the Chronically Ill and Aged*	Audio - color - 20 min.
Dentistry for the Handicapped*	Audio - color - 18 min.
Dentistry for the Handicapped Child*	Audio - color - 27 min.
Dental Health and Oral Hygiene*	Audio - color - 30 min.
Oral Care and Preventive Hygiene For the Mentally Retarded*	Audio - color - 20 min.
Personal Oral Hygiene for the Handicapped*	Audio - color - 22 min.
Pioneering Dental Health for the Handicapped*	Audio - color - 15 min.
Special Education Dental Health Lesson Unit**	Color filmstrip with tape

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*Available through American Dental Association, Bureau of Audio-Visual Service, 211 East Chicago Avenue, Chicago, Illinois, 60611.

**Available Agra-Aids Films, 509 Barton Springs, Austin, Texas, 78741.